

Work Order ID 80957

80957

Page 1

Thursday, April 12, 2012 12:58:52 PM

Item ID: D206-642-151

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Replacement Skidtube

Start Date: 3/6/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 3/20/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3804

A

IIN-D206-642

O

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-151

CHG001

N/A

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 80957

80957

Page 2

March-06-12 8:55:33 AM

Item ID: D206-642-151

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Replacement Skidtube

Start Date: 06/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

110

0.00

110

Skidtubes

0.00

Skidtubes

Skidtubes

Memo

1-Debur Fwd edge of tube

2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804

3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Qty Part Number Description Batch

A/R Aluminum Rod m120164

4-Grind weld flush to cap on top surface only.

5-Cut Aft end as per dwg D3804 from front of tube and Debur

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804

7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.

8-Drill pilot holes using Dt8166 & DT8169D & DT9771.

9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.

10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.

SAD 12-04-10

CF 12-4-11

CF 12-4-11

SAD 12-04-12

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 80957

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Page 3

March-06-12 8:55:33 AM

Item ID: D206-642-151 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube
 Start Date: 06/03/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 20/03/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| | 11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads. | | | | | | | | |
| | 12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804 | | | | | | | | |
| | 13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder | | | | | | | | |
| | 14-Remove indexing edge using DT8741 as per Dwg D3804 | | | | | | | | |
| | 15-C'sink GHW rivet holes as per Dwg D3804 | | | | | | | | |
| | 16- Open Aft cap hole #6. ****no wearplate holes for this skidtube**** | | | | | | | | |
| | 17-Deburr tube and blow out chips from inside the tube | | | | | | | | |

SAD
12-04-12

120

QC6- Inspect dimensions to drawing

0.00

120

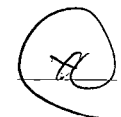
QC

Memo

0.00

Quality Control

8/12/13



| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Page 4

March-06-12 8:55:33 AM

Item ID: D206-642-151

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube

Stop *NS2*

Start Date: 06/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 140 | Chemical Conversion Coat per QSI005 4.1 | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | | | | | | | | | |
| 150 | QC7-Inspect Chemical Conversion Coat | 0.00 | | | | | | | |
| *150* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 160 | Skidtubes | 0.00 | | | | | | | |
| *160* | | | | | | | | | |
| Skidtubes | Memo | 0.00 | | | | | | | |
| Skidtubes | 1-Open holes to finished size as per Dwg D3804, (without cutting fluid) | | | | | | | | |
| | 2-C'sink crossbolt spacer holes as per Dwg D3804(without cutting fluid) | | | | | | | | |
| | 3-Deburr and blow out all chips from inside the tube | | | | | | | | |

NG 12-4-13

1 0 BE 12/04/13

DL 12/04/16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 80957

80957

Page 5

March-06-12 8:55:33 AM

Item ID: D206-642-151 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube
 Start Date: 06/03/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 20/03/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 170 | QC6- Inspect dimensions to drawing | 0.00 | | | | | | | |
| *170* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 180 | | 0.00 | | | | | | | |
| *180* | | | | | | | | | |
| Skidtubes | | | | | | | | | |
| Skidtubes | Memo | 0.00 | | | | | | | |
| | 1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required | | | | | | | | |
| | 2-Bond D2654-1 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting | | | | | | | | |
| | Start Date: <u>12/04/16</u> Time: <u>10:30</u> | | | | | | | | |
| | Finish Date: <u>12/04/17</u> Time: <u>8:00</u> | | | | | | | | |
| | Pick: | | | | | | | | |
| | Qty Part Number Description Batch | | | | | | | | |
| | A/RSikaflex-291 <u>12/221</u> | | | | | | | | |
| | Sikaflex expire date: <u>13/01/17</u> | | | | | | | | |

DP 12-4-16

DC 12/04/16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

Work Order ID 80957

80957

Page 6

March-06-12 8:55:33 AM

Item ID: D206-642-151

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Replacement Skidtube

Start Date: 06/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Memo

0.00

Quality Control

1 0 8/2/04/17

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

Work Order ID 80957

80957

Page 7

March-06-12 8:55:33 AM

Item ID: D206-642-151

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 06/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 200 | Skidtubes | 0.00 | | | | | | | |
| *200* | | | | | | | | | |
| Skidtubes | | | | | | | | | |
| Skidtubes | | | | | | | | | |
| | Memo | 0.00 | | | | | | | |
| | 1-remove alodine from around hole and prepare for welding | | | | | | | | |
| | 2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod. | | | | | | | | |
| | Pick: QtyPart NumberDescriptionBatch A/RAluminum Rod <u>M120164</u> | | | | | | | | |
| | 3-Grind welds flush as per Dwg D3804. | | | | | | | | |
| | 4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required. A/RSS Rod <u>NONE</u> | | | | | | | | |
| | 5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D3804. Deburr | | | | | | | | |

BE 12-04-17

CF 12-4-17

BE 12-04-18

DEC 12-4-18

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 80957***80957***

Page 8

March-06-12 8:55:33 AM

Item ID: D206-642-151

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 06/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

210

210

HandFinish

Hand Finishing

HandFinishing

Memo

Install D2680-041 Nut Plate as per Dwg D3804

0.00

0.00



12-4-18

215

215

QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

0.00

1x



12-04-19

220

220

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

Memo

0.00

0.00

8/12/19

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Page 9

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Setup Start

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Revision ID:

Item Name: Replacement Skidtube

Stop

NS2

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Cust Item ID:

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Date:

Run Start

NR1

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Date:

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Date:

Stop

NR2

Sequence ID/
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Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230

QC5- Inspect part completeness to step on W/O

0.00

230

QC

Memo

0.00

Quality Control

240

Pressure Wash per QSI005 4.3

0.00

240

HandFinish

Memo

0.00

Hand Finishing

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

250

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

3:50
3200F
4:20

2/6 12-4-20
IX 12/24/23

M121134

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Page 10

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Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Replacement Skidtube

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Required Date: 20/03/2012 Req'd Qty: 1.00

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 260 | QC3- Inspect Part Finish | 0.00 | | | | | | | |
| *260* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 270 | | 0.00 | | | | | | | |
| *270* | HandFinishing | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | 1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D3804. Clean excess adhesive. | | | | | | | | |

1 0 12426

1 8 OP 1404/24

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 80957

80957

Page 11

March-06-12 8:55:33 AM

Item ID: D206-642-151

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 06/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 280 | HandFinishing | 0.00 | | | | | | | |
| *280* | | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | 1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/RSikaflex-291 <u>121221</u> Sikaflex expire date: <u>13/01</u> | | | | | | | | |
| | 2- Install wearplate as per dwg | | | | | | | | |
| | 2-Wing Walk as per Dwg D3804 and QSI 005 4.4 Batch: <u>170902</u> | | | | | | | | |
| 290 | QC3- Inspect Part Finish | 0.00 | | | | | | | |
| *290* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

1 2 2P 12/04/24
RH

S. Clark

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 80957

80957

Page 12

March-06-12 8:55:33 AM

Item ID: D206-642-151 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube
 Start Date: 06/03/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 20/03/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|--|----------------------|---------|---------|--------------|---------------|---------------|------------------|----------------|
| 300 *300* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | 8-26-12 | | | | | |
| 310 *310* Packaging Packaging | Packaging Memo Identify and pack for shipping as per PPP D206-642-151 Location: _____ PPP Rev: _____ | 0.00 0.00 | | 8-26-12 | | | | 12/5/17 | |
| 320 *320* QC Quality Control | QC21- Final Inspection - Work Order Release Memo | 0.00 0.00 | | | | | | 12/5/23 | |

MF
12-05-22

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-06-12 8:55:38 AM

Page 1

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 10.12.08 PER IIN REV.N DD VERF:EC
REV:B 11.09.16 PER IIN REV.O DD VERF:EC

IPP

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|----------|
| D2620 | | Manufactured | No | | | 110 | Each | 19.0000 | 1 | 1 | | | |
| *D2620* | | | | | | | | | ** | | | SAD | 12-04-10 |
| Skidtube, 206 Skidtube | | | | | | | | | | | | | |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| LG | 19 | |
| 77996 | 1 | |
| 77999 | 1 | |
| 78000 | 4 | |
| 79542 | 1 | |
| 79543 | 2 | |
| 79544 | 8 | |
| 79545 | 2 | |

D2647

Manufactured No

110

Each

57.0000

1

D2647

Cap

**

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| LG002 | 57 | |
| 75482 | 57 | |

1

BE 12-04-10

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-04

Purchased

No

180

Each

7,125.000

52

52

CR3212-4-04

Cherry Rivet

**

DC 12/04/16

Location

Loc Qty

Loc Code

ST331

168

116471

78

117816

3

118686

1

118840

16

119017

60

119075

10

st510

6957

119075

6957

D2654-1

Manufactured

No

180

Each

23.0000

1

1

D2654-1

Web

**

DC 12/04/16

Location

Loc Qty

Loc Code

LG

23

79540

5

79541

6

80054

2

80055

10

D3286-1

Manufactured

No

180

Each

121.0000

2

2

D3286-1

Doubler

**

SAD 12-04-16

Location

Loc Qty

Loc Code

LG002

217

74872

6

78014

93

ST046

-96

76772

22

B79556

2

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Page 3

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

200

Each

1,736.000

19

19

D2649

Cross Bolt Spacer

**

BE12/04/17
B 79564 19

Location

Loc Qty

Loc Code

LG

1279

77574

2

79502

403

79503

399

79504

214

79565

261

LG001

457

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

78020

6

78583

2

79566

330

D3286-3

Manufactured No

200

Each

113.0000

2

2

D3286-3

Spacer

**

BE12/04/18

Location

Loc Qty

Loc Code

LG

9

78015

9

LG001

104

74117

1

79557

103

2

March-06-12 8:55:38 AM

Shop Packet Print

Page 3

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2680-041

Manufactured No

210 Each

158.0000 1

D2680-041

Nut Plate

**

P/CC 12-4-18

Location

Loc Qty

Loc Code

ST013 116

78016 116

ST019 42

76790 42

CR3212-4-03

Purchased No

210 Each

1,484.000 2

CR3212-4-03

Cherry Rivet

**

P/CC 12-4-18

Location

Loc Qty

Loc Code

FP002 494

114859 494

ST331 990

110139 2

119017 988

AN960JD416

*NAS1149D0463J Purchased

No

210 Each

20.0000 1

AN960JD416

Washer

**

1 (2P) 12/04/24

Location

Loc Qty

Loc Code

ST351 20

116289 20

CCR264SS3-3

Purchased No

210 Each

723.0000 2

CCR264SS3-3

Cherry Rivet

**

P/CC 12-4-18

Location

Loc Qty

Loc Code

ST331 723

113973 2

117849 125

119017 596

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

MS27039-4-06

Purchased

No

210

Each

204.0000

1

1

MS27039-4-06

Screw

**

1 (2P) 12/04/24

Location

Loc Qty

Loc Code

ST292

204

119075 ✓

204

D2651-1

Manufactured

No

270

Each

749.0000

6

6

D2651-1 **

Plug

**

6 (2P) 12/04/24

Location

Loc Qty

Loc Code

FP001

884

57869

1

66445

10

69018

2

70827

2

70839

8

71037

8

77559

30

78584

245

79234

278

FP-A

-135

77559

1

78124

164

D2651-3

Manufactured

No

270

Each

2,017.000

6

6

D2651-3

O-Ring

**

6 (2P) 12/04/24

Location

Loc Qty

Loc Code

FP001

89

61962

12

73828

77

FP-A

1928

78126 ✓

1928

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Page 6

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3873-1

Manufactured No

280

Each

431.0000

14

14

D3873-1

Bushing

**

14 (2P) 12/04/24

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST057 | 372 | |
| 79561 | 372 | |
| ST067 | 59 | |
| 64760 | 1 | |
| 68247 | 4 | |
| 73829 | 19 | |
| 73830 | 2 | |
| 79560 | 33 | |

D2646

Manufactured No

280

Each

50.0000

1

1

D2646

Aft Cap

**

1 (2P) 12/04/24

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP002 | 50 | |
| 62678 | 5 | |
| 68280 | 5 | |
| 70945 | 1 | |
| 71070 | 2 | |
| 73294 | 1 | |
| 73825 | 2 | |
| 78018 | 34 | |

D3805-041

Manufactured No

280

Each

8.0000

1

1

D3805-041

Wearplate Assembly Fwd, Low Gear

**

1 (2P) 12/04/24

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP001 | 8 | |
| 76779 | 1 | |
| 78003 | 7 | |

March-06-12 8:55:38 AM

Shop Packet Print

Page 6

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Page 7

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08

Purchased

No

280

Each

1,243.000

2

2

MS27039-1-08

Screw

**

2 (2P) 12/04/24

Location

Loc Qty

Loc Code

ST291

1243

117423

81

119075

156

119109

6

120308

1000

MS21042L3

Purchased

No

280

Each

3,643.000

7

7

MS21042L3

Nut

**

7 (2P) 12/04/24

Location

Loc Qty

Loc Code

ST300

3643

117441

16

117885

32

118451

5

118927

3

119017

3407

119075

180

D3805-045

Manufactured

No

280

Each

14.0000

1

1

D3805-045

Wearplate Assembly Aft, Low Gear

**

1 (2P) 12/04/24

Location

Loc Qty

Loc Code

FP001

14

73817

1

74896

1

78010

2

78011

10

AN960JD10L

*NAS1149D0332J Purchased

No

280

Each

0.0000

2

2

*AN960JD10L *

Washer

**

2 (2P) 12/04/24

120 b44

March-06-12 8:55:38 AM

Shop Packet Print

Page 7

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

• Picklist Print

March-06-12 8:55:38 AM

Work Order ID: 80957

80957

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3-37A Purchased No

280 Each

790.0000 7 7

AN3-37A

Bolt

**

7

SP 12/04/24

Location

Loc Qty

Loc Code

ST353

790

117619

4

119086 ✓

786

NAS1149D0363J Purchased No

280 Each

2,181.000 7 7

NAS1149D0363.J

Washer

**

7

SP 12/04/24

Location

Loc Qty

Loc Code

ST298

2181

117601

61

118077

1

118612

18

119537

257

120142 ✓

274

120308

570

120644

1000

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| ITEM | Qty -041 | Qty -043 | Part Number | Description |
|------|-------------|-------------|--------------|---------------------------------|
| 1 | X | | D3804-041 | SKIDTUBE ASSEMBLY, 206 A/B LOW |
| 2 | | X | D3804-043 | SKIDTUBE ASSEMBLY, 206 A/B HIGH |
| 5 | 1 | 1 | D2600-1-160 | EXTRUSION |
| 6 | 1 | 1 | D2646 | AFT CAP |
| 7 | 1 | 1 | D2647 | CAP |
| 8 | 19 | 20 | D2649 | CROSS BOLT SPACER |
| 9 | 6 | 8 | D2651-1 | PLUG |
| 10 | 6 | 8 | D2651-3 | O-RING |
| 11 | | 1 | D2654-3 | WEB |
| 12 | 1 | | D2654-1 | WEB |
| 13 | 1 | 1 | D2680-041 | NUT PLATE |
| 14 | 2 | 2 | D3286-1 | DOUBLER |
| 15 | 2 | 2 | D3286-3 | STUD |
| 21 | 2 | 2 | AN960JD10L | WASHER |
| 22 | 1 | 1 | AN960JD416 | WASHER |
| 23 | 2 | 2 | CCR264SS3-3 | RIVET |
| 24 | 2 | 2 | CR3212-4-03 | RIVET |
| 25 | 52 | 52 | CR3212-4-04 | RIVET |
| 26 | 2 | 2 | MS27039-1-08 | SCREW |
| 27 | 1 | 1 | MS27039-4-06 | SCREW |

NOTES

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 80957 MLCJ
12/03/06

RELEASED
UP 09.03.03
per ECR 09-536

| | | | |
|------------|-------------|--|--------------|
| A | NEW ISSUE | MB | 08.07.07 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | <i>qj</i> | DART AEROSPACE USA, INC | |
| DRAWN | <i>j</i> | PORT HADLOCK, WA | |
| CHECKED | <i>qj</i> | DRAWING NO. | REV. A |
| MFG. APPR. | <i>E</i> | D3804 | SHEET 1 OF 5 |
| APPROVED | <i>qj</i> | TITLE | SCALE |
| DE APPR. | <i>qj</i> | SKIDTUBE ASSEMBLY, 206A/B | NTS |
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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries



80957

Technical drawing of a boat hull section showing various details and dimensions. The drawing includes the following labels and dimensions:

- DETAIL E A7-5**: Located at the bow (left) of the hull.
- MASK THREADS IN D2680-041 BEFORE APPLYING FINISH REF DETAIL E**: A note pointing to the bow area.
- FINISH HOLES PER SECTION D-D**: A label pointing to a series of small holes along the hull.
- ANTI-SKID PAINT 3 PL**: A label pointing to a hatched area on the hull.
- DETAIL F B2-5**: Located at the stern (right) of the hull.
- Dimensions**: Various measurements are indicated with arrows:
 - 1.5 (multiple locations)
 - 9.5
 - 10.0
 - 0.5
 - 12 (multiple locations, likely indicating hole spacing)
 - 1.5 (multiple locations)
- Other Labels**:
 - D**: A label pointing to a specific feature on the hull.
 - A6-5 D**: A label pointing to a feature near the stern.
 - P**: A label pointing to a feature on the hull.
 - Φ**: A label pointing to a circular feature at the stern.

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|------------|----------|---|--------------|
| DESIGN | 99 | DART AEROSPACE USA, INC | |
| DRAWN | | PORT HADLOCK, WA | |
| CHECKED | 9 | DRAWING NO. | REV. A |
| MFG. APPR. | BE | D3804 | SHEET 2 OF 5 |
| APPROVED | | TITLE | SCALE |
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| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

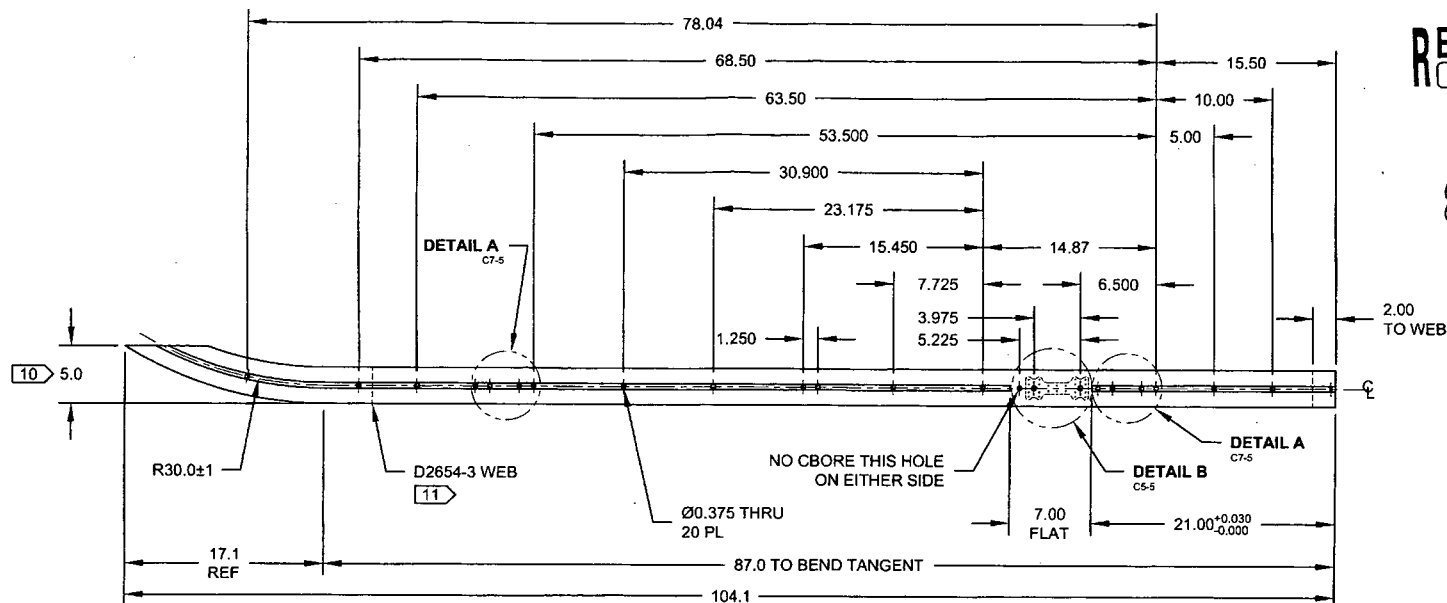
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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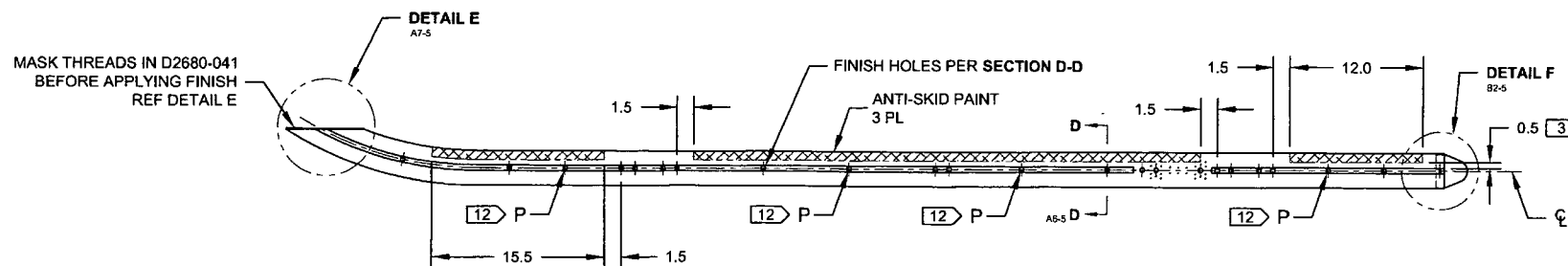
NOTE: Date & initial all entries

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(09-03-03)

80957



D3804-043 BENDING/DRILLING DETAIL



D3804-043 ASSEMBLY/FINISHING DETAIL

| | | | |
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| DRAWN | 97 | PORT HADLOCK, WA | |
| CHECKED | 97 | DRAWING NO. | REV. A |
| MFG. APPR. | 97 | D3804 | SHEET 3 OF 5 |
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| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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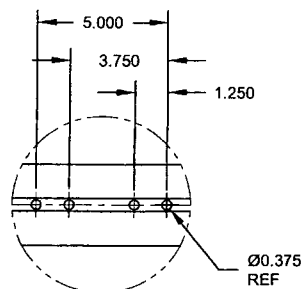
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

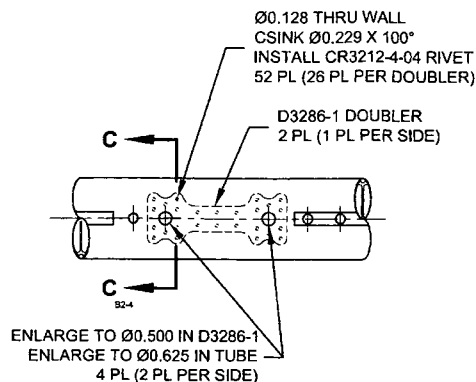
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

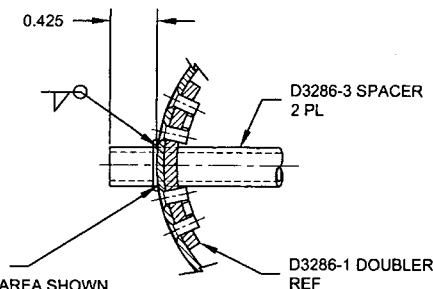
RELEASED
CP 09.03.05



DETAIL A
D6-2
C2-2
D6-3
C2-3
SCALE NONE



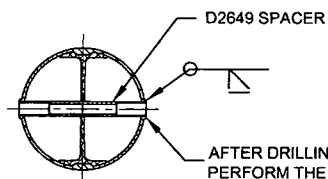
DETAIL B
C3-2
C3-3
SCALE NONE



- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

80957

SECTION C-C C6-4
PARTIAL SECTION
SCALE NONE



SECTION D-D A4-2
A4-3
FOR Ø0.375 HOLES ONLY
SCALE NONE

| | | | |
|------------|----------|--|--------------|
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| DRAWN | 1 | PORT HADLOCK, WA | |
| CHECKED | 97 | DRAWING NO. | REV. A |
| MFG. APPR. | 8 | D3804 | SHEET 4 OF 5 |
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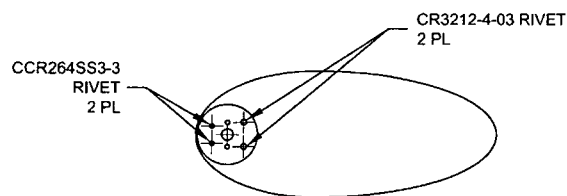
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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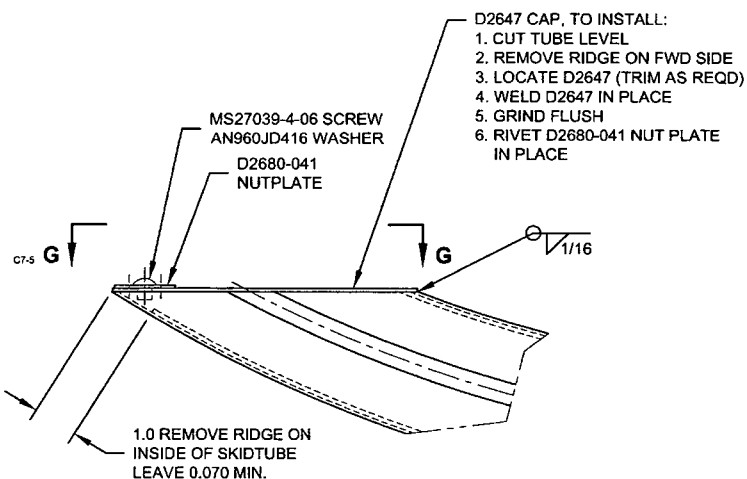
NOTE: Date & initial all entries

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90 09.03.07

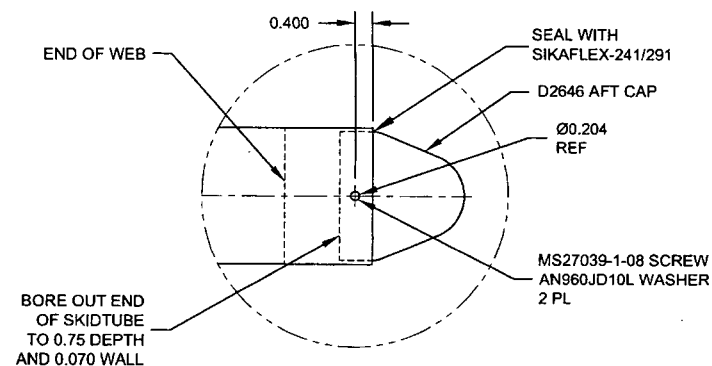
80957



VIEW G-G
SCALE NONE
A7-5



DETAIL E
SCALE NONE
B7-2
B7-3



DETAIL F
SCALE NONE
B2-2
B2-3

| | | | |
|------------|----------|--|--------------|
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| DRAWN | 97 | PORT HADLOCK, WA | |
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NOTE: Date & initial all entries

NO. 290

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 80956
Part number: D206-642-151
Description: Skid tube
Welding Process: Tig[☒] Mig[☐]
Base material: Alum.
Current: AC[☒] DC[☐]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[☐]
Penetration: pass[☒] fail[☐]

UNACCEPTABLE

Cracks: pass[☒] fail[☐]
Undercut: pass[☒] fail[☐]
Pin holes: pass[☒] fail[☐]
Overlap (cold lap): pass[☒] fail[☐]
Porosity (surface): pass[☒] fail[☐]
Coloration: pass[☒] fail[☐]

Qualifier David Kuehl Date of Test Coupon 12-04-18
Welder Barclay Elliott Date of Test Coupon 12-04-18

The above named individual is qualified in accordance with AWS D17.1.2001 to weld